

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



(11)

EP 0 744 872 A3

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
23.07.1997 Bulletin 1997/30

(51) Int Cl.⁶: **H04N 13/00**

(43) Date of publication A2:
27.11.1996 Bulletin 1996/48

(21) Application number: 96303592.8

(22) Date of filing: 21.05.1996

(84) Designated Contracting States:
DE ES FR GB IT NL

(30) Priority: 22.05.1995 JP 148111/95
03.07.1995 JP 189799/95
27.02.1996 JP 65508/96

(71) Applicant: **CANON KABUSHIKI KAISHA**
Tokyo (JP)

(72) Inventors:

- Taniguchi, Naosato, c/o Canon K. K. Ohta-ku, Tokyo (JP)
- Hoshi, Hiroaki, c/o Canon K. K. Ohta-ku, Tokyo (JP)

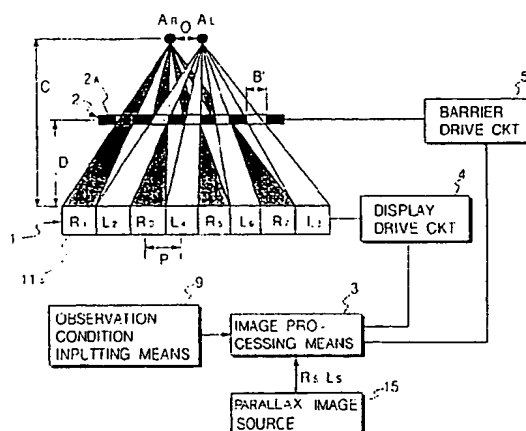
- Sugawara, Saburo, c/o Canon K. K.
Ohta-ku, Tokyo (JP)
- Sudo, Toshiyuki, c/o Canon K. K.
Ohta-ku, Tokyo (JP)
- Morishima, Hideki, c/o Canon K. K.
Ohta-ku, Tokyo (JP)
- Inoguchi, Kazutaka, c/o Canon K. K.
Ohta-ku, Tokyo (JP)

(74) Representative:
Beresford, Keith Denis Lewis et al
BERESFORD & Co.
2-5 Warwick Court
High Holborn
London WC1R 5DJ (GB)

(54) Stereoscopic image display method and apparatus

(57) This invention provides a stereoscopic image display method and apparatus. The method includes the steps of dividing each of a plurality of parallax images supplied from a parallax image source having parallax image information into stripe pixels, displaying, on a display, a single stripe image by arranging and synthesizing some of the stripe pixels in a predetermined order, displaying a slit pattern consisting of a light-transmission portion and a light-shielding portion arranged at a predetermined pitch on a spatial light modulation element arranged at a predetermined position on the front or rear side of the display, inputting light transmitted through the stripe pixels, corresponding to the right and left eyes of an observer, of the stripe image to the right and left eyes of the observer via the spatial light modulation element and synchronously displaying the stripe pattern and the slit pattern in units of pixels or scan lines on corresponding scan lines of the display and the spatial light modulation element.

FIG. 1





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 96 30 3592

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	WO 95 05052 A (SORENSEN JENS OLE) 16 February 1995	1-4,7, 10, 12-14, 17, 19-22, 25,28, 29,31, 35,36, 39,41, 44-46	H04N13/00
Y		16,30, 32,38	
A		5,6,8,9, 11,15, 16,18, 23,24, 26,27, 30, 32-34, 37,38, 40,42,43	
	* page 1, line 13 - page 2, line 15 * * page 3, line 25 - page 5, line 4; figures 1-4 * * page 6, line 6 - line 12; figure 1 * * page 7, line 1 - line 7; figure 1 * * page 7, line 28 - page 8, line 7; figures 4,6 * * page 8, line 22 - page 9, line 3; figure 8 * * page 9, line 31 - page 10, line 9; figures 1,10 * --- -/--		TECHNICAL FIELDS SEARCHED (Int.Cl.6) H04N
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29 May 1997	Examiner De Paepe, W
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document I : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.92 (Pw/Cdt)



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 96 30 3592

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X A	<p>EP 0 540 137 A (JAPAN BROADCASTING CORP) 5 May 1993</p> <p>* page 3, line 3 - line 32 *</p> <p>* page 4, line 9 - line 37; figures 1,6A-6F,7A-7C *</p> <p>* page 5, line 29 - line 42 *</p> <p>* page 7, line 14 - page 8, line 30; figures 2-4 *</p> <p>* page 9, line 1 - line 13; figure 2 *</p> <p>* page 9, line 14 - line 25; figure 4 *</p> <p>* page 9, line 46 - line 55; figure 5 *</p> <p>* page 10, line 3 - line 22; figures 1,11 *</p> <p>* page 10, line 33 - line 41; figure 13 *</p> <p>* page 10, line 42 - page 11, line 1; figures 14,15 *</p> <p>---</p>	<p>1,3, 5-13,19, 21, 23-29, 31,35, 41-46 2,4, 14-18, 20,22, 30, 32-34, 36-40</p>	<p>TECHNICAL FIELDS SEARCHED (Int.Cl.6)</p>
Y A	<p>EP 0 570 179 A (SHARP KK) 18 November 1993</p> <p>* column 1, line 54 - column 2, line 2 *</p> <p>* column 3, line 7 - line 42; figure 1 *</p> <p>* column 4, line 10 - column 5, line 22; figures 2,3 *</p> <p>* column 5, line 23 - line 38; figure 4 *</p> <p>* column 6, line 59 - column 7, line 22; figures 8,9 *</p> <p>* column 7, line 57 - column 8, line 8 *</p> <p>---</p> <p>-/--</p>	<p>30,32 1-29,31, 33-46</p>	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29 May 1997	Examiner De Paepe, W
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone</p> <p>Y : particularly relevant if combined with another document of the same category</p> <p>A : technological background</p> <p>O : non-written disclosure</p> <p>P : intermediate document</p> <p>T : theory or principle underlying the invention</p> <p>E : earlier patent document, but published on, or after the filing date</p> <p>D : document cited in the application</p> <p>I : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

EPO FORM 150 0182 (P4/C01)



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 96 30 3592

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Y A	US 5 132 839 A (TRAVIS ADRIAN R L) 21 July 1992 * column 4, line 35 - column 5, line 29; figures 1,2A * * column 5, line 50 - column 6, line 47; figure 2B * * column 7, line 27 - column 8, line 2 * * column 8, line 16 - line 33; figure 3 * ---	16,38 1-15, 17-37, 39-46	
A	EP 0 588 332 A (EASTMAN KODAK CO) 23 March 1994 * abstract *	16,38	
A	EP 0 354 851 A (NIPPON TELEGRAPH & TELEPHONE) 14 February 1990 * column 9, line 14 - line 35; figures 11A,11B * -----	7-9, 25-27	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
Place of search	Date of completion of the search	Examiner	
THE HAGUE	29 May 1997	De Paepe, W	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application I : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

EPO FORM 150 (04/92) (F01C01)